

Preface



During the latter half of the twentieth century, we witnessed an unparalleled era of progress in medical science. Among other important scientific advances, we discovered the genetic code and are well on our way toward mapping the entire human genome, we began to explore how our brains work in concert with other body systems to promote or to impede health, and we developed increasingly sophisticated medical devices and technologies that allow us to look at the actual functioning of the myriad systems that make up human beings.

The *Tenth Special Report to the U.S. Congress on Alcohol and Health* presents significant new scientific findings about alcohol abuse and alcoholism since the last Special Report, issued in 1997. These findings clearly demonstrate that alcohol investigators working in fields as diverse as epidemiology, genetics, neuroscience, toxicology, prevention, and treatment are using the very latest tools and techniques of science to expand our knowledge of how to prevent, reduce, and treat alcohol problems. Because alcohol use problems exact such a personal, social, and economic toll on the American people—an estimated 100,000 lives and \$184.6 billion annually—the scientific progress described in the *Tenth Special Report* is heartening.

As important as this progress is for those whose lives have been affected by alcohol use, I believe that the *Tenth Special Report* serves a greater purpose. Science does not happen in a vacuum. Rather, it is a cumulative process that builds upon the knowledge developed by many scientists working in many different areas of investigation. Therefore, what is discovered about one disease or health condition may very well provide important clues about other diseases and conditions, clues that will help in the development of medications, treatments, and preventive approaches that can be widely applied. Because alcohol affects virtually all body systems and because alcohol use problems affect all levels of human interaction, the alcohol research field represents, in many respects, a microcosm of science in its entirety. Thus, the findings described in the *Tenth Special Report* about genetics, neural circuitry, the effect of the environment on gene expression, fetal development, cognition, psychological therapies, prevention and education, and treatment contribute significantly to the knowledge we need to solve not only the problems associated with alcohol abuse and alcoholism, but also the problems of human biology and behavior in general.

I would like to commend the scientists who participated in the development of the *Tenth Special Report* and the staff of the National Institute on Alcohol Abuse and Alcoholism for their efforts to bring this important information to the attention of the U.S. Congress and the American people.

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